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SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPT.
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

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| EXAMINER |
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CHANG, SUNRAY

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| ART UNIT | PAPER NUMBER |
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2121

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10/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/763,786

Applicant(s)

FISCHER ET AL.

Examiner

Sunray Chang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This office action is in responsive to the paper filed on August 23rd, 2007.

Claims 1 – 14 are presented for examination.

Claims 1 – 14 are rejected.

Claim Rejections - 35 USC § 112

2. Claims 1 – 14 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the payment figure is a service fee to be paid by the user of the process control system to an Application Service Provider, however, nowhere in the claims, drawings indicates how to send the payment figure to the Application Service Provider.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. **Claims 1 – 13 are rejected** under 35 U.S.C. 103(a) as being unpatentable over A. Dean Papadopoulos et al. (U.S. Patent No. 6,282,454, and referred to as **Papadopoulos** hereinafter), and in view of Ryoichi Mori (U.S. Patent No. 5,103,392 and referred to as **Mori** hereinafter).

Regarding independent claim 1,

Papadopoulos teaches,

- A process control system, [industrial control system, Col. 2, lines 33 – 36]
- operation running in the process control system [application program to display, Col. 4, lines 1 – 6; enables the data transfer between the application program and the user through the Internet, Col. 3, lines 48 – 60; Programmable logic controllers (PLCs) are widely used in industry and process control, Col. 2, lines 8 – 12; Using this interface, the user can retrieve all pertinent data regarding the operation of the PLC, including PLC configuration, I/O and register status, operating statistics, diagnostics, and distributed I/O configurations. Updates

to operating software can also be downloaded through the Internet access, Col. 2, lines 58 – 63]

Papadopoulos does not teach a processor adapted to determine a payment figure regarding the creation **or** removal of a process control function **or** regarding a user activity **or** regarding an execution of an automation function.

Mori teaches,

- a processor adapted to determine a payment figure regarding the creation **or** removal of a process control function **or** regarding a user activity **or** regarding an execution of an automation function. [a system for storing the history of use of marketable programs (software) such as marketable computer programs. By storage of the history of use, proprietors of marketable programs can charge for the exact amount of use of the software. Specifically, the system allows proprietors to obtain information on the exact state of use of software by a specific user and charge appropriately for that use, Col. 1, lines 14 – 23]

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of **Papadopoulos** to include "a processor adapted to determine a payment figure regarding the creation **or** removal of a process control function **or** regarding a user activity **or** regarding an execution of an automation function", for the purpose of making the use of such software more attractive to users [Col. 1, lines 14 – 23].

Regarding dependent claim 2,

Papadopoulos teaches,

A process control system according to claim 1, further comprising:

- a process control computer; [industrial control system, Col. 2, lines 33 – 36; Fig. 1; further see Col. 3, lines 29 – 47]
- a client computer; [personal computer, Fig. 1; further see Col. 3, lines 29 – 47] and
- the Internet, [Internet, Fig. 1; Col. 2, lines 33 – 36] wherein
- at least a part of the operations running in the process control system run on the process control computer. [Programmable logic controllers (PLCs) are widely used in industry and process control, Col. 2, lines 8 – 12; Using this interface, the user can retrieve all pertinent data regarding the operation of the PLC, including PLC configuration, I/O and register status, operating statistics, diagnostics, and distributed I/O configurations. Updates to operating software can also be downloaded through the Internet access, Col. 2, lines 58 – 63; Fig. 1]

Regarding Claim 3,

Papadopoulos teaches,

- at least one field device for automation of at least one system component [PLC, application programs, a ladder program for controlling the I/O devices, Col. 4, lines 36 – 46] wherein

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- at least a part of the operations running in the process control system run on the field device.
[the application programs, a ladder program for controlling the I/O devices, Col. 4, lines 36 – 46]

Regarding dependent claims 4 and 8,

Papadopoulos teaches,

A process control system according to claim 2, wherein

- the process control computer comprises a Web server [Web server module, Web site, Fig. 1 – 3; further see Col. 3, line 29 – Col. 4, line 35] and
- the client computer comprises an Internet browser [a personal computer (PC) 8 having a commercially available browser, Col. 3, lines 22 – 47] so that
- the client computer can influence the operations running in the process control computer [the browser 10 functions as a remote human-machine interface or HMI control of the process control system, Col. 4, lines 1 – 6] via the Internet, [Fig. 1] wherein
- the operations can also include operations [application program, Col. 3, lines 48 – 60] by which further operations are initiated in further components of the process control system.
[application programs includes a ladder logic program for controlling the I/O devices ... to send commands to the PLC and receive the response, Col. 4, lines 36 – 46]

Regarding Claim 5,

Papadopoulos teaches,

A process control system according to Claim 4, wherein the further components comprise

- field devices for monitoring and control of components of a technical system [PLC, application programs includes a ladder logic program for controlling the I/O devices ... to send commands to the PLC and receive the response, Col. 4, lines 36 – 46] that are connected by radio communication **and/or** by a fixed link to the process control computer, [Fig. 2, Fig. 3] wherein
- the further operations also comprise those operations that are executed in the field devices. [application programs includes a ladder logic program for controlling the I/O devices ... to send commands to the PLC and receive the response, Col. 4, lines 36 – 46]

Regarding Claim 6

Papadopoulos teaches,

A process control system according to claim 5, wherein

- communication between the components of the process control system is based on the TCP/IP transmission protocol (TCP/IP) [TCP/IP network, Ethernet network, Col. 4, lines 36 – 46; see further see Abstract, Col. 5, lines 20 – 28].

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Regarding dependent claims 7 – 13,

Papadopoulos teaches,

- A process control system [industrial control system, Col. 2, lines 33 – 36]

Papadopoulos does not teach the payment figure is a service fee to be paid by the user to an Application Service Provider.

Mori teaches,

- the payment figure is a service fee to be paid by the user to an Application Service Provider.
[use of software by a specific user and charge appropriately for that use, Col. 1, lines 20 – 21], for the purpose of making the use of such software more attractive to users [Col. 1, lines 14 – 23]

4. **Claim 14 is rejected** under 35 U.S.C. 103(a) as being unpatentable over **Papadopoulos** in view of **Mori**, further in view of Richard A. Baker (U.S. Patent No. 7,035,898 and referred to as **Baker** hereinafter).

Regarding independent claim 14,

Papadopoulos teaches,

- a process control system [industrial control system, Col. 2, lines 33 – 36]

Papadopoulos does not teach a method for determining a payment figure, providing a processor unit adapted to record the creation and/or removal of a process control function and an execution of an automation function; providing a device adapted to record a user activity; and determining a payment figure by the processor unit using recorded data of the preceding steps.

Mori teaches,

- a method for determining a payment figure, [a system for storing the history of use of marketable programs (software) such as marketable computer programs. By storage of the history of use, proprietors of marketable programs can charge for the exact amount of use of the software. Specifically, the system allows proprietors to obtain information on the exact state of use of software by a specific user and charge appropriately for that use, Col. 1, lines 14 – 23]
- providing a device adapted to record a user activity; [storage of the history of use, the system allows proprietors to obtain information on the exact state of use of software by a specific user, Col. 1, lines 14 – 23] and
- determining a payment figure by the processor unit using recorded data of the preceding steps. [the system allows proprietors to obtain information on the exact state of use of software by a specific user and charge appropriately for that use, Col. 1, lines 14 – 23], for the purpose of making the use of such software more attractive to users [Col. 1, lines 14 – 23]

Baker teaches

- providing a processor unit adapted to record the creation and/or removal of a process control function and an execution of an automation function; [The present invention allows a user at a remote location, using a browser, to create and edit a PLC operating program by adding and deleting various components illustrated in the mimic page; Rearranging the components on the mimic page will result in a different operating program. The program can be saved on the programming device 21 for later transfer to the PLC 32. Col. 6, lines 42 – 61], for a user at a remote location to edit the operating program of the PLC 32 by accessing a web page associated with the program package 33 via the Internet, Col. 6, lines 42 – 44]

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of **Papadopoulos** to include “a method for determining a payment figure, providing a processor unit adapted to record the creation and/or removal of a process control function and an execution of an automation function; providing a device adapted to record a user activity; and determining a payment figure by the processor unit using recorded data of the preceding steps”, for the purpose of making the use of such software more attractive to users [**Mori**, Col. 1, lines 14 – 23] and for a user at a remote location to edit the operating program of the PLC 32 by accessing a web page associated with the program package 33 via the Internet [**Baker**, Col. 6, lines 42 – 44].

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Response to Amendment

Claim Rejections - 35 USC § 102 & 103

5. Applicants argue **Omshehe** reference is not prior art which the examiner agrees after reviewing the priority document, the provisional application, 60/232,733. The rejections have been withdrawn, however, the claims have been rejected by further cited references, **Papadopoulos, Mori and Baker** as indicated above in current office action.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunray Chang who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. via telephone number (571) 272-3682 or facsimile transmission (571) 273-3682 or email sunray.chang@uspto.gov.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Vincent can be reached on (571) 272-3080.

The official facsimile transmission number for the organization where this application or proceeding is assigned is (571) 273-8300.

Sunray Chang
Patent Examiner

DAVID VINCENT
SUPERVISORY PATENT EXAMINER
